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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/882,459	06/14/2001	Morteza Kalhour	NC38668	8929

30973 7590 08/25/2004

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EXAMINER

WU, QING YUAN

ART UNIT

PAPER NUMBER

2127

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/882,459	Applicant(s) KALHOUR, MORTEZA	
	Examiner Qing-Yuan Wu	Art Unit 2127	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/13/02.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/14/01, 11/13/02</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-21 are pending in the application.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

3. Claim 21 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim in proper dependent form, or rewrite the claim in independent form.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 8-9, 13-14, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. The following terms lack antecedent basis:
 - i. The identity- claims 8 and 9.
 - ii. The application – claims 13 and 14.
- b. The following claim language is indefinite:

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- i. As per claim 20, it is uncertain whether this is a program or a method claim.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 19-21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The use of “a program” did not tangibly embodied in a computer readable medium; the claims are not statutory since no requisite functionality is present to satisfy the practical application requirement. See MPEP 2106.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-4, 7, 15-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Notenboom et al (U.S. Patent 5,748,468).

10. As to claim 1, Notenboom et al teach the invention as claimed including a method of resolving conflicts in the allocation of a shared resource [110, Fig. 4] between a first

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application to which the resource is currently allocated and a second application [92, Fig. 4] requesting access to the resource, including determining whether the second application is a predetermined favored application [col. 3, lines 25-42; col.11, lines 25-28; col. 12, lines 1-8; Fig. 6A; 175, Fig. 6B].

11. As to claims 2-4, and 7, Notenboom et al teach the invention as claimed including a method according to claim 1, in the event that the second application is the predetermined favored application [col. 12, lines 21-23], determining whether the resource has the authority to permit allocation to the second application [col. 12, lines 35-57; 177, Fig. 6B], and in the event that the resource has the authority to permit allocation, allocating the resource to the second application [col. 11, lines 59-67; col. 12, lines 61-64; col. 13, lines 27-30]. Whereas, in the event that the resource does not have the authority to permit allocation, requesting a decision as to how to allocate the resource [col. 12, lines 35 –36], and the decision comprises denying allocation to the second application [col. 12, lines 50-64].

12. As to claims 15-21, these are system and product claims that correspond to the method claims 1-4, and 7. Therefore, they are rejected for the same reason as claims 1-4, and 7 above.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Notenboom et al (U.S. Patent 5,748,468) as applied to claim 1 above.

15. As to claims 5-6, Notenboom et al teach the invention substantially as claimed in claim 4. Notenboom do not specifically teach the step wherein the decision depends on input from a user of the first and second applications and depends on predetermined priorities assigned to the first and second applications. However, Notenboom et al disclose the user having the ability to designate a “particular operations are to take precedence over others” [col. 6, lines 30-41; col. 9, lines 44-52].

16. It would have been obvious to one of an ordinary skill in the art at the time the invention was made, to have recognized that in the event that a resource does not have the authority to permit allocation of resources to the requesting application, the ultimate decision should be made based on an input from a user, or on the priorities assigned to the applications as being considered and implemented in Notenboom et al’s method of resource management.

17. Claims 8-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Notenboom et al as applied to claims 1, in view of Tanaka et al (U.S. Patent 5,377,352).

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18. As to claim 8, Notenboom et al teach the invention substantially as claimed in claim 1. Notenboom et al do not teach the step of determining whether the second application is a predetermined favored application comprises comparing the identity of the second application with the identity of the favored application. However, Tanaka et al teach the selection of a task next to locking a shared resource in which the selection is base on comparing the task identifier registered in the locking task table to the task identifier of the requesting task [Tanaka et al, col. 6, lines 6-20; 703, Fig. 7].

19. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Notenboom et al and Tanaka et al because using the ID for comparing would improve the throughput of Notenboom et al's system by providing the benefit of being able to identify an application or task with top priorities and allow this application or task to allocate the resource over others.

20. As to claim 9, Notenboom et al as modified teach the invention substantially as claimed in claim 8, wherein the identity of the favored application is stored at the resource [Tanaka et al, col. 5, lines 38-60].

21. As to claim 10, Notenboom et al teach the invention substantially as claimed in claim 1. Notenboom et al do not specifically teach in the event that the second application requests use of the resource without requesting its allocation, recording the second application as a user irrespective of whether it is the favored application. However, Notenboom et al disclosed countable resources that can be allocated in part [col. 3, lines 47-48]. It is well known in the art that there are different varieties of

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resources such as hard-drive access, database access, and memory access, etc. that grants basic user access, and not ownership/allocation to the resources. A person with ordinary skill in the art at the time of the invention was made would have included the use of resource without requesting allocation to avoid the overhead of overcoming ownership conflicts when ownership of the resource is not require.

22. As to claims 11-12, Notenboom et al teach a method of allocating a shared resource between a plurality of applications requesting access to the resource [abstract; col.11, lines 25-40], comprising selecting an application that is to be favored during resource allocation [175, Fig. 6B].

23. Notenboom et al do not specifically teach communicating information identifying the favored application to the resource and updating the resource with information relating to changes to the favored application. However, Tanaka et al teach a task locking a shared resource which includes the steps of registering a task identifier of a task being executed upon locking the task to a resource, wherein the task with its identifier registered has priority to the shared resource over other tasks [Tanaka et al, col.3, lines 6-20]. Tanaka et al also teach that when information relating to changes to the favored application, the resource gets updated [Tanaka et al, col. 5, lines 38-60].

24. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have include the registering of a task or communicating information identifying the task to the resource as taught by Tanaka et al to Notenboom et al's resource management method providing the benefit of being able to identify an

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application or task as the top priority task and allow this application or task to allocate the resource over others.

25. As to claim 13, Notenboom et al teach the invention substantially as claimed, including determining the favored application as the application which is prioritized at a given time [col. 6, lines 35-39].

26. As to claim 14, Notenboom et al teach the invention substantially as claimed in claim 13. Notenboom et al do not teach the prioritized application comprises the application with which the user is interacting at the given time. However, Notenboom et al disclosed that the user has the ability to designate a particular operation to take precedence over others [col. 6, lines 40-41]. It would have been obvious to one of an ordinary skill in the art at the time the invention was made, to have modified Notenboom et al's method of prioritizing tasks to include the application with which the user is interacting as a prioritized application providing the benefit of properly prioritizing the application's access to resources.

27. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5,991,793 to Mukaida et al, and U.S. Patent No. 6,330,612 to Boonie et al teach method of resource allocation.

U.S. Patent No. 6,253,273 to Blumenau teaches a lock mechanism.

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28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qing-Yuan Wu whose telephone number is (571) 272-3776. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Qing-Yuan Wu

Examiner

Art Unit 2127


MENG-AI T. AN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100